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FORM**

(to be used for all correspondence after initial filing)

Application Number	09/529,239	
	Filing Date	10-27-00
	First Named Inventor	Marie-Pascale Doutriaux
	Group Art Unit	1638
	Examiner Name	David H. Kruse
Attorney Docket Number	A33153-PCT-USA	
Total Number of Pages in This Submission		

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JAN 21 2003
TECH. CEN.**ENCLOSURES (check all that apply)**

<input checked="" type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Assignment Papers (for an Application)	<input type="checkbox"/> After Allowance Communication to Group
<input checked="" type="checkbox"/> Fee Attached	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input checked="" type="checkbox"/> Amendment / Reply	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Status Letter
<input checked="" type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address	<input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Terminal Disclaimer	Third Substitute Sequence Listing
<input type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> Request for Refund	
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> CD, Number of CD(s) _____	
<input type="checkbox"/> Response to Missing Parts/ Incomplete Application	Remarks <input checked="" type="checkbox"/>	
<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	Response to Notice To Comply	

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	BakerBotts LLP 30 Rockefeller Plaza New York, NY 10112	
Signature		Att Name: Alicia A. Russo PTO Reg: 46,192
Date	1-10-03	

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, DC 20231 on this date: 1-10-03			
Typed or printed name	Alicia A. Russo		
Signature		Date	1-10-03

Title: METHODS FOR OBTAINING PLANT VARIETIES

Use Space Below for Additional Information:

BAKER BOTTS LLP

FEE TRANSMITTAL **for FY 2003**

Effective 01/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 110

Complete if Known

Application Number	09/529,239
Filing Date	10-27-00
First Named Inventor	Marie-Pascale Doutriaux
Examiner Name	David H. Kruse
Art Unit	1638
Attorney Docket No.	A33153-PCT-USA

TECH CENTER 1600/2900

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METHOD OF PAYMENT (check all that apply)
☒ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account:

 Deposit
Account
Number
Deposit
Account
Name

02-4377

Baker Botts LLP

The Commissioner is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☒ Credit any overpayments

☒ Charge any additional fee required under 37CFR 1.16 and 1.17

☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

FEE CALCULATION
1. BASIC FILING FEE

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1001 750	2001 375	Utility filing fee	
1002 330	2002 165	Design filing fee	
1003 520	2003 260	Plant filing fee	
1004 750	2004 375	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	

SUBTOTAL (1) (\$ 0

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	Extra Claims	Fee from below	Fee Paid
Independent Claims	- 20 = 0	X 0	= 0
Multiple Dependent	- 3 = 0	X 0	= 0

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description
1202 18	2202 9	Claims in excess of 20
1201 84	2201 42	Independent claims in excess of 3
1203 280	2203 140	Multiple dependent claim, if not paid
1204 84	2204 42	** Reissue independent claims over original patent
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$ 0

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)
3. ADDITIONAL FEES
Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1051 130	2051 65			Surcharge - late filing fee or oath	
1052 50	2052 25			Surcharge - late provisional filing fee or cover sheet	
1053 130	1053 130			Non-English specification	
1812 2,520	1812 2,520			For filing a request for <i>ex parte</i> reexamination	
1804 920*	1804 920*			Requesting publication of SIR prior to Examiner action	
1805 1,840*	1805 1,840*			Requesting publication of SIR after Examiner action	
1251 110	2251 55			Extension for reply within first month	110
1252 410	2252 205			Extension for reply within second month	
1253 930	2253 465			Extension for reply within third month	
1254 1,450	2254 725			Extension for reply within fourth month	
1255 1,970	2255 985			Extension for reply within fifth month	
1401 320	2401 160			Notice of Appeal	
1402 320	2402 160			Filing a brief in support of an appeal	
1403 280	2403 140			Request for oral hearing	
1451 1,510	1451 1,510			Petition to institute a public use proceeding	
1452 110	2452 55			Petition to revive - unavoidable	
1453 1,300	2453 650			Petition to revive - unintentional	
1501 1,300	2501 650			Utility issue fee (or reissue)	
1502 470	2502 235			Design issue fee	
1503 630	2503 315			Plant issue fee	
1460 130	1460 130			Petitions to the Commissioner	
1807 50	1807 50			Processing fee under 37 CFR 1.17(q)	
1806 180	1806 180			Submission of Information Disclosure Stmt	
8021 40	8021 40			Recording each patent assignment per property (times number of properties)	
1809 750	2809 375			Filing a submission after final rejection (37 CFR 1.129(a))	
1810 750	2810 375			For each additional invention to be examined (37 CFR 1.129(b))	
1801 750	2801 375			Request for Continued Examination (RCE)	
1802 900	1802 900			Request for expedited examination of a design application	

Other fee (specify)

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ 110

SUBMITTED BY

Name (Print/Type)

Alicia A. Russo

Registration No.
(Attorney/Agent)

46,192

(Complete if applicable)

Telephone 212-408-2627

Signature

Alicia A. Russo

Date

1-10-03



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/529,239	10/27/2000	Marie-Pascale Doutriaux	A33153-PCT USA	1839

21003 7590 11/13/2002

BAKER & BOTTS
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112



EXAMINER

KRUSE, DAVID H

ART UNIT PAPER NUMBER

1638

DATE MAILED: 11/13/2002

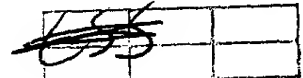
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Please find below and/or attached an Office communication concerning this application or proceeding.

BAKER BOTTS L.L.P.

02 NOV 18 AM 11:11

TO



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Docketed

For 12/13/2002 by

5/13/03

ml



UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant's Copy
COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, DC 20231
www.uspto.gov

APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
---------------------------------	-------------	---	---------------------



EXAMINER

ART UNIT	PAPER
----------	-------

22

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents

The communication filed 26 September 2002 is not fully responsive to the Office communication mailed 21 May 2002 for the reason(s) set forth on the attached Notice To Comply With The Sequence Rules or CRF Diskette Problem Report. Applicant must comply with the requirements of the sequence rules (37 CFR 1.821 - 1.825) before the application can be examined under 35 U.S.C. §§ 131 and 132.

Since the reply appears to be bona fide attempt to comply with the requirements of the sequence rules (37 CFR 1.821 - 1.825), applicant is given a TIME PERIOD of **ONE (1) MONTH** from the mailing date of this communication within which to correct the deficiency so as to comply with the sequence rules (37 CFR 1.821 - 1.825) in order to avoid abandonment of the application under 37 CFR 1.821(g). EXTENSIONS OF THIS TIME PERIOD MAY BE GRANTED UNDER 37 CFR 1.136(a).

Any inquiry concerning this communication should be directed to Examiner David Kruse, Ph.D., Art Unit 1638, whose telephone number is (703) 306-4539.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center receptionist whose telephone number is (703) 308-0196.

David Kruse Art Unit 1638
6 November 2002

AMY J. NELSON, PH.D
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600

Notice to Comply



Application No.

529,239

Examiner

David H Kruse

Applicant(s)

DOUTRIAUX ET AL.

Art Unit

1638

NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES

Applicant must file the items indicated below within the time period set the Office action to which the Notice is attached to avoid abandonment under 35 U.S.C. § 133 (extensions of time may be obtained under the provisions of 37 CFR 1.136(a)).

The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 C.F.R. 1.821 - 1.825 for the following reason(s):

- ☒ 1. This application clearly fails to comply with the requirements of 37 C.F.R. 1.821-1.825. Applicant's attention is directed to the final rulemaking notice published at 55 FR 18230 (May 1, 1990), and 1114 OG 29 (May 15, 1990). If the effective filing date is on or after July 1, 1998, see the final rulemaking notice published at 63 FR 29620 (June 1, 1998) and 1211 OG 82 (June 23, 1998).
- ☐ 2. This application does not contain, as a separate part of the disclosure on paper copy, a "Sequence Listing" as required by 37 C.F.R. 1.821(c).
- ☐ 3. A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 C.F.R. 1.821(e).
- ☒ 4. A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing."
- ☐ 5. The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A Substitute computer readable form must be submitted as required by 37 C.F.R. 1.825(d).
- ☐ 6. The paper copy of the "Sequence Listing" is not the same as the computer readable form of the "Sequence Listing" as required by 37 C.F.R. 1.821(e).
- ☐ 7. Other:

Applicant Must Provide:

- ☒ An initial or substitute computer readable form (CRF) copy of the "Sequence Listing".
- ☒ An initial or substitute paper copy of the "Sequence Listing", as well as an amendment directing its entry into the specification.
- ☒ A statement that the content of the paper and computer readable copies are the same and, where applicable, include no new matter, as required by 37 C.F.R. 1.821(e) or 1.821(f) or 1.821(g) or 1.825(b) or 1.825(d).

For questions regarding compliance to these requirements, please contact:

For Rules Interpretation, call (703) 308-4216

For CRF Submission Help, call (703) 308-4212

PatentIn Software Program Support

Technical Assistance.....703-287-0200

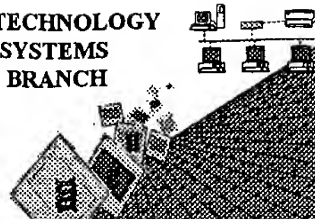
To Purchase PatentIn Software.....703-306-2600

PLEASE RETURN A COPY OF THIS NOTICE WITH YOUR REPLY



2

BIOTECHNOLOGY
SYSTEMS
BRANCH



1838
#21
BP
11-5-02

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/529,239B
Source: 1600
Date Processed by STIC: 10/3/2002

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THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
Or
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002



1600

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/529,239B

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TIME: 18:20:24

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Does Not Comply
Corrected Diskette Needed
pp1-2,5-7

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OCT 25 2002

TECH CENTER 1600/2900

1 <110> APPLICANT: Doutriaux, Marie-Pascale
2 Betzner, Andreas
3 Freyssinet, Georges
4 Perez, Pascal
5 <120> TITLE OF INVENTION: METHOD FOR OBTAINING PLANT VARIETIES
6 <130> FILE REFERENCE: A33153-PCT-USA 072667.0128
7 <140> CURRENT APPLICATION NUMBER: US/09/529,239B
8 <141> CURRENT FILING DATE: 2000-10-27
9 <150> PRIOR APPLICATION NUMBER: PCT/EP98/06977
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11 <160> NUMBER OF SEQ ID NOS: 103

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RAW SEQUENCE LISTING

DATE: 10/21/2002

PATENT APPLICATION: US/09/529,239B

TIME: 18:20:24

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487 <223> OTHER INFORMATION: Polypeptide MSH3

same env

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RAW SEQUENCE LISTING

DATE: 10/21/2002

PATENT APPLICATION: US/09/529,239B

TIME: 18:20:24

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Output Set: N:\CRF4\10212002\I529239B.raw

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515      Tyr Thr Lys Ala Thr Leu Glu Ala Ala Glu Asp Ile Ser Gly Gly Cys
516                210               215               220
517      Gly Gly Glu Glu Gly Phe Gly Ser Gln Ser Asn Phe Leu Val Cys Val
518                225               230               235               240
519      Val Asp Glu Arg Val Lys Ser Glu Thr Leu Gly Cys Gly Ile Glu Met
520                245               250               255
521      Ser Phe Asp Val Arg Val Gly Val Val Gly Val Glu Ile Ser Thr Gly
522                260               265               270
523      Glu Val Val Tyr Glu Glu Phe Asn Asp Asn Phe Met Arg Ser Gly Leu
524                275               280               285
525      Glu Ala Val Ile Leu Ser Leu Ser Pro Ala Glu Leu Leu Leu Gly Gln
526                290               295               300
527      Pro Leu Ser Gln Gln Thr Glu Lys Phe Leu Val Ala Met Ala Gly Pro
528                305               310               315               320
529      Thr Ser Asn Val Arg Val Glu Arg Ala Ser Leu Asp Cys Phe Ser Asn
530                325               330               335
531      Gly Asn Ala Val Asp Glu Val Ile Ser Leu Cys Glu Lys Ile Ser Ala
532                340               345               350
533      Gly Asn Leu Glu Asp Asp Lys Glu Met Lys Leu Glu Ala Ala Glu Lys
534                355               360               365
535      Gly Met Ser Cys Leu Thr Val His Thr Ile Met Asn Met Pro His Leu
536                370               375               380
537      Thr Val Gln Ala Leu Ala Leu Thr Phe Cys His Leu Lys Gln Phe Gly
538                385               390               395               400
539      Phe Glu Arg Ile Leu Tyr Gln Gly Ala Ser Phe Arg Ser Leu Ser Ser

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RAW SEQUENCE LISTING

DATE: 10/21/2002

PATENT APPLICATION: US/09/529,239B

TIME: 18:20:24

Input Set : N:\Cr4\Refhold\I529239B.raw

Output Set: N:\CRF4\10212002\I529239B.raw

540					405					410				415		
541	Asn	Thr	Glu	Met	Thr	Leu	Ser	Ala	Asn	Thr	Leu	Gln	Gln	Leu	Glu	Val
542				420					425					430		
543	Val	Lys	Asn	Asn	Ser	Asp	Gly	Ser	Glu	Ser	Gly	Ser	Leu	Phe	His	Asn
544			435					440					445			
545	Met	Asn	His	Thr	Leu	Thr	Val	Tyr	Gly	Ser	Arg	Leu	Leu	Arg	His	Trp
546		450					455					460				
547	Val	Thr	His	Pro	Leu	Cys	Asp	Arg	Asn	Leu	Ile	Ser	Ala	Arg	Leu	Asp
548	465					470					475				480	
549	Ala	Val	Ser	Glu	Ile	Ser	Ala	Cys	Met	Gly	Ser	His	Ser	Ser	Ser	Gln
550				485					490					495		
551	Leu	Ser	Ser	Glu	Leu	Val	Glu	Glu	Gly	Ser	Glu	Arg	Ala	Ile	Val	Ser
552			500					505					510			
553	Pro	Glu	Phe	Tyr	Leu	Val	Leu	Ser	Ser	Val	Leu	Thr	Ala	Met	Ser	Arg
554			515					520					525			
555	Ser	Ser	Asp	Ile	Gln	Arg	Gly	Ile	Thr	Arg	Ile	Phe	His	Arg	Thr	Ala
556		530					535					540				
557	Lys	Ala	Thr	Glu	Phe	Ile	Ala	Val	Met	Glu	Ala	Ile	Leu	Leu	Ala	Gly
558	545					550				555					560	
559	Lys	Gln	Ile	Gln	Arg	Leu	Gly	Ile	Lys	Gln	Asp	Ser	Glu	Met	Arg	Ser
560				565					570					575		
561	Met	Gln	Ser	Ala	Thr	Val	Arg	Ser	Thr	Leu	Leu	Arg	Lys	Leu	Ile	Ser
562			580					585					590			
563	Val	Ile	Ser	Ser	Pro	Val	Val	Val	Asp	Asn	Ala	Gly	Lys	Leu	Leu	Ser
564		595					600					605				
565	Ala	Leu	Asn	Lys	Glu	Ala	Ala	Val	Arg	Gly	Asp	Leu	Leu	Asp	Ile	Leu
566		610					615					620				
567	Ile	Thr	Ser	Ser	Asp	Gln	Phe	Pro	Glu	Leu	Ala	Glu	Ala	Arg	Gln	Ala
568	625				630				635						640	
569	Val	Leu	Val	Ile	Arg	Glu	Lys	Leu	Asp	Ser	Ser	Ile	Ala	Ser	Phe	Arg
570				645					650					655		
571	Lys	Lys	Leu	Ala	Ile	Arg	Asn	Leu	Glu	Phe	Leu	Gln	Val	Ser	Gly	Ile
572			660					665					670			
573	Thr	His	Leu	Ile	Glu	Leu	Pro	Val	Asp	Ser	Lys	Val	Pro	His	Asn	Trp
574		675					680					685				
575	Val	Lys	Val	Asn	Ser	Thr	Lys	Lys	Thr	Ile	Arg	Tyr	His	Pro	Pro	Glu
576		690				695					700					
577	Ile	Val	Ala	Gly	Leu	Asp	Glu	Leu	Ala	Leu	Ala	Thr	Glu	His	Leu	Ala
578	705				710				715						720	
579	Ile	Val	Asn	Arg	Ala	Ser	Trp	Asp	Ser	Phe	Leu	Lys	Ser	Phe	Ser	Arg
580			725						730					735		
581	Tyr	Tyr	Thr	Asp	Phe	Lys	Ala	Ala	Val	Gln	Ala	Leu	Ala	Ala	Leu	Asp
582			740					745					750			
583	Cys	Leu	His	Ser	Leu	Ser	Thr	Leu	Ser	Arg	Asn	Lys	Asn	Tyr	Val	Arg
584		755					760					765				
585	Pro	Glu	Phe	Val	Asp	Asp	Cys	Glu	Pro	Val	Glu	Ile	Asn	Ile	Gln	Ser
586		770				775					780					
587	Gly	Arg	His	Pro	Val	Leu	Glu	Thr	Ile	Leu	Gln	Asp	Asn	Phe	Val	Pro
588		785				790					795				800	

RAW SEQUENCE LISTING

DATE: 10/21/2002

PATENT APPLICATION: US/09/529,239B

TIME: 18:20:24

Input Set : N:\Cr4\Refhold\I529239B.raw

Output Set: N:\CRF4\10212002\I529239B.raw

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589      Asn Asp Thr Ile Leu His Ala Glu Gly Glu Tyr Cys Gln Ile Ile Thr
590                      805                      810                      815
591      Gly Pro Asn Met Gly Gly Lys Ser Cys Tyr Ile Arg Gln Val Ala Leu
592                      820                      825                      830
593      Ile Ser Ile Met Ala Gln Val Gly Ser Phe Val Pro Ala Ser Phe Ala
594                      835                      840                      845
595      Lys Leu His Val Leu Asp Gly Val Phe Thr Arg Met Gly Ala Ser Asp
596                      850                      855                      860
597      Ser Ile Gln His Gly Arg Ser Thr Phe Leu Glu Glu Leu Ser Glu Ala
598                      865                      870                      875                      880
599      Ser His Ile Ile Arg Thr Cys Ser Ser Arg Ser Leu Val Ile Leu Asp
600                      885                      890                      895
601      Glu Leu Gly Arg Gly Thr Ser Thr His Asp Gly Val Ala Ile Ala Tyr
602                      900                      905                      910
603      Ala Thr Leu Gln His Leu Leu Ala Glu Lys Arg Cys Leu Val Leu Phe
604                      915                      920                      925
605      Val Thr His Tyr Pro Glu Ile Ala Glu Ile Ser Asn Gly Phe Pro Gly
606                      930                      935                      940
607      Ser Val Gly Thr Tyr His Val Ser Tyr Leu Thr Leu Gln Lys Asp Lys
608                      945                      950                      955                      960
609      Gly Ser Tyr Asp His Asp Asp Val Thr Tyr Leu Tyr Lys Leu Val Arg
610                      965                      970                      975
611      Gly Leu Cys Ser Arg Ser Phe Gly Phe Lys Val Ala Gln Leu Ala Gln
612                      980                      985                      990
613      Ile Pro Pro Ser Cys Ile Arg Arg Ala Ile Ser Met Ala Ala Lys Leu
614                      995                      1000                      1005
615      Glu Ala Glu Val Arg Ala Arg Glu Arg Asn Thr Arg Met Gly Glu Pro
616                      1010                      1015                      1020
617      Glu Gly His Glu Glu Pro Arg Gly Ala Glu Glu Ser Ile Ser Ala Leu
618                      1025                      1030                      1035                      1040
619      Gly Asp Leu Phe Ala Asp Leu Lys Phe Ala Leu Ser Glu Glu Asp Pro
620                      1045                      1050                      1055
621      Trp Lys Ala Phe Glu Phe Leu Lys His Ala Trp Lys Ile Ala Gly Lys
622                      1060                      1065                      1070
623      Ile Arg Leu Lys Pro Thr Cys Ser Phe
624                      1075                      1080

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685 <210> SEQ ID NO: 26

686 <211> LENGTH: 2188

687 <212> TYPE: DNA

688 <213> ORGANISM: Arabidopsis thaliana ecotype Columbia

689 <223> OTHER INFORMATION: Clone 43

E--> 690 <400> SEQUENCE: 26

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691      ccgggagatgc agcgccagag atcgattttg tctttcttcc aaaaaccac ggcggcgact      60
692      acgaagggtt tggtttcgg cgatgctgct agcggcgggg gcggcagcgg aggaccacga      120
693      tttaatgtga aggaaggga tgctaaaggc gacgcttctg tacgttttgc tgtttcgaaa      180
694      tctgtcgatg aggttagagg aacggatact ccaccggaga aggttcgcgc tctgtctctg      240
695      ccgtctggat ttaagccggc tgaatccgcc ggtgatgctt cgtccctggt ctccaatatt      300
696      atgcataagt ttgtaaaagt cgatgatcga gattgttctg gagagaggag ccgagaagat      360
697      gttgttccgc tgaatgattc atctctatgt atgaaggcta atgatgttat tcttcaattt      420

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RAW SEQUENCE LISTING

DATE: 10/21/2002

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TIME: 18:20:24

Input Set : N:\Cr4\Refhold\I529239B.raw

Output Set: N:\CRF4\10212002\I529239B.raw

698	cgttccaata	atggtaaaac	tcaagaaaga	aaccatgctt	ttagtttcag	tgggagagct	480
699	gaacttagat	cagtagaaga	tataggagta	gatggcgatg	ttcctggtcc	agaaacacca	540
700	gggatgcgtc	cacgtgcttc	tcgcttgaag	cgagttcttg	aggatgaaat	gacttttaag	600
701	gaggataagg	ttcctgtatt	ggactctaac	aaaaggctga	aaatgctcca	ggatccggtt	660
702	tgtggagaga	agaaagaagt	aaacgaagga	accaaatttg	aatggcttga	gtcttctcga	720
703	atcagggatg	ccaatagaag	acgtcctgat	gacccctttt	acgatagaaa	gaccttacac	780
704	ataccacctg	atgttttcaa	gaaaatgtct	gcatacaaaa	agcaatatgt	gagtgttaag	840
705	agtgaatata	tggacattgt	gcttttcttt	aaagtgggga	aattttatga	gctgtatgag	900
706	ctagatgcgg	aattaggtca	caaggagctt	gactggaaga	tgaccatgag	tgggtgtggga	960
707	aaatgcagac	aggttggtat	ctctgaaagt	gggatagatg	aggcagtgc	aaagctatta	1020
708	gctcgtggat	ataaagttag	acgaatcgag	cagctagaaa	catctgacca	agcaaaagcc	1080
709	agaggtgcta	atactataat	tccaagggaag	ctagtttcagg	tattaaactcc	atcaaacgca	1140
710	agcgagggaa	acatcgggcc	tgatgccgtc	catcttcttg	ctataaaaaga	gatcaaaatg	1200
711	gagctacaaa	agtgttcaac	tgtgtatgga	tttgcttttg	ttgactgtgc	tgcccttgagg	1260
712	ttttgggttg	gggtccatcag	cgatgatgca	tcattgtgctg	ctcttgaggc	gttattgatg	1320
713	caggtttctc	caaaggaagt	gttatatgac	agtaaagggc	tatcaagaga	agcacaanaag	1380
714	gctctaagga	aataacgtt	gacaggtct	acggcggtac	agttggctcc	agtaccacaa	1440
715	gtaatggggg	atacagatgc	tgctggagtt	agaaatataa	tagaatctaa	cggatacttt	1500
716	aaagggttctt	ctgaatcatg	gaactgtgct	gttgatggtc	taaatgaatg	tgatgttgcc	1560
717	cttagtgctc	ttggagagct	aattaatcat	ctgtctaggc	taaagctaga	agatgtactt	1620
718	aagcatgggg	atatttttcc	ataccaagtt	tacaggggtt	gtctcagaat	tgatggccag	1680
719	acgatggtaa	atcttgagat	atttaacaat	agctgtgatg	gtggctcctc	agggaccttg	1740
720	tacaaatata	ttgataactg	tgtagtcca	actggttaagc	gactcttaag	gaattggatc	1800
721	tgccatccac	tcaaagatgt	agaaagcatc	aataaacggc	ttgatgtagt	tgaagaattc	1860
722	acggcaaaact	cagaaagtat	gcaaatcact	ggccagtatc	tccacaaaact	tccagactta	1920
723	gaaagactgc	tcggacgcat	caagtctagc	gttcgatcat	cagcctctgt	gttgccctgct	1980
724	cttctgggga	aaaaagtgtc	gaacaacga	gttaaagcat	ttgggcaaat	tgtgaaaggg	2040
725	ttcagaagtg	gaattgatct	gttggtggct	ctacagaagg	aatcaaatat	gatgagtttg	2100
726	ctttataaac	tctgtaaact	tcctatatta	gtaggaaaaa	gcgggctaga	gttatttctt	2160
727	tctcaattcg	aagcagccat	agatagcg				2188
729	<210>	SEQ ID NO: 27					
730	<211>	LENGTH: 1385					
731	<212>	TYPE: DNA					
732	<213>	ORGANISM: Arabidopsis thaliana ecotype Columbia					
733	<223>	OTHER INFORMATION: Clone 62					
E--> 734	<400>	SEQUENCE: 27					
735	catcagcctc	tgtgttgctt	gctcttcttg	ggaaaaaagt	gctgaaacaa	cgagttaaag	60
736	catttgggca	aattgtgaaa	gggttcagaa	gtggaattga	tctgttggtg	gctctacaga	120
737	aggaatcaaa	tatgatgagt	ttgctttata	aactctgtaa	acttcctata	ttagtaggaa	180
738	aaagcgggct	agagttattt	ctttctcaat	tcgaagcagc	catagatagc	gactttccaa	240
739	attatcagaa	ccaagatgtg	acagatgaaa	acgctgaaac	tctcacaata	cttatcgaa	300
740	tttttatcga	aagagcaact	caatggtctg	aggctattca	caccataagc	tgccatagatg	360
741	tcctgagatc	ttttgcaatc	gcagcaagtc	tctctgcttg	aagcatggcc	aggcctgtta	420
742	tttttcccga	atcagaagct	acagatcaga	atcagaaaac	aaaagggcc	atacttaaaa	480
743	tccaaggact	atggcatcca	tttgagttg	cagccgatgg	tcaattgctt	gttcggaatg	540
744	atatactcct	tggcgaggct	agaagaagca	gtggcagcat	tcatcctcgg	tcattgttac	600
745	tgacgggacc	aaacatgggc	ggaaaaatcaa	ctcttcttcg	tgcaacatgt	ctggccgtta	660
746	tctttgccc	acttggtctg	tacgtgccc	gtgagtcctg	cgaaatctcc	ctcgtggata	720
747	ctatcttcac	aaggcttggc	gcattctgata	gaatcatgac	aggagagagt	accttttttg	780

RAW SEQUENCE LISTING

DATE: 10/21/2002

PATENT APPLICATION: US/09/529,239B

TIME: 18:20:24

Input Set : N:\Crf4\Refhold\I529239B.raw

Output Set: N:\CRF4\10212002\I529239B.raw

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748      tagaatgcac tgagacagcg tcagttcttc agaatgcaac tcaggattca ctagtaatcc      840
749      ttgacgaact gggcagagga actagtactt tcgatggata cgccattgca tactcggttt      900
750      ttcgtcacct ggtagagaaa gttcaatgtc ggatgctctt tgcaacacat taccaccctc      960
751      tcaccaagga attcgcgtct caccacgtg tcacctcgaa acacatggct tgcgcattca      1020
752      aatcaagatc tgattatcaa ccacgtggtt gtgatcaaga cctagtgttc ttgtaccggt      1080
753      taaccgaggg agcttgctct gagagctacg gacttcaagt ggcactcatg gctggaatac      1140
754      caaaccaagt ggttgaaaca gcatcaggtg ctgctcaagc catgaagaga tcaattgggg      1200
755      aaaacttcaa gtcaagttag ctaagatctg agttctcaag tctgcatgaa gactggtctc      1260
756      agtcattggt ggggtatttct cgagtcgccc acaacaatgc ccccatgggc gaagatgact      1320
757      acgacacttt gttttgctta tggcatgaga tcaaactctc ttactgtgtt cccaaataac      1380
758      ccggg                                     1385

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1005 <210> SEQ ID NO: 31

1006 <211> LENGTH: 1109

1007 <212> TYPE: PRT

1008 <213> ORGANISM: Arabidopsis thaliana ecotype Columbia

1009 <223> OTHER INFORMATION: Polypeptide MSH6

E--> 1010 <400> SEQUENCE: 31

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1011      Met Gln Arg Gln Arg Ser Ile Leu Ser Phe Phe Gln Lys Pro Thr Ala
1012           1              5              10              15
1013      Ala Thr Thr Lys Gly Leu Val Ser Gly Asp Ala Ala Ser Gly Gly Gly
1014           20              25              30
1015      Gly Ser Gly Gly Pro Arg Phe Asn Val Arg Glu Gly Asp Ala Lys Gly
1016           35              40              45
1017      Asp Ala Ser Val Arg Phe Ala Val Ser Lys Ser Val Asp Glu Val Arg
1018           50              55              60
1019      Gly Thr Asp Thr Pro Pro Glu Lys Val Pro Arg Arg Val Leu Pro Ser
1020           65              70              75              80
1021      Gly Phe Lys Pro Ala Glu Ser Ala Gly Asp Ala Ser Ser Leu Phe Ser
1022           85              90              95
1023      Asn Ile Met His Lys Phe Val Lys Val Asp Asp Arg Asp Cys Ser Gly
1024           100             105             110
1025      Glu Arg Ser Arg Glu Asp Val Val Pro Leu Asn Asp Ser Ser Leu Cys
1026           115             120             125
1027      Met Lys Ala Asn Asp Val Ile Pro Gln Phe Arg Ser Asn Asn Gly Lys
1028           130             135             140
1029      Thr Gln Glu Arg Asn His Ala Phe Ser Phe Ser Gly Arg Ala Glu Leu
1030           145             150             155             160
1031      Arg Ser Val Glu Asp Ile Gly Val Asp Gly Asp Val Pro Gly Pro Glu
1032           165             170             175
1033      Thr Pro Gly Met Arg Pro Arg Ala Ser Arg Leu Lys Arg Val Leu Glu
1034           180             185             190
1035      Asp Glu Met Thr Phe Lys Glu Asp Lys Val Pro Val Leu Asp Ser Asn
1036           195             200             205
1037      Lys Arg Leu Lys Met Leu Gln Asp Pro Val Cys Gly Glu Lys Lys Glu
1038           210             215             220
1039      Val Asn Glu Gly Thr Lys Phe Glu Trp Leu Glu Ser Ser Arg Ile Arg
1040           225             230             235             240
1041      Asp Ala Asn Arg Arg Arg Pro Asp Asp Pro Leu Tyr Asp Arg Lys Thr
1042           245             250             255

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Use of n and/or Xaa has been detected in the Sequence Listing.

Review the Sequence Listing to insure a corresponding explanation is presented in the <220> to <223> fields of each sequence using n or Xaa.

RAW SEQUENCE LISTING

DATE: 10/21/2002

PATENT APPLICATION: US/09/529,239B

TIME: 18:20:24

Input Set : N:\Crf4\Refhold\I529239B.raw

Output Set: N:\CRF4\10212002\I529239B.raw

1043	Leu	His	Ile	Pro	Pro	Asp	Val	Phe	Lys	Lys	Met	Ser	Ala	Ser	Gln	Lys
1044				260					265						270	
1045	Gln	Tyr	Trp	Ser	Val	Lys	Ser	Glu	Tyr	Met	Asp	Ile	Val	Leu	Phe	Phe
1046			275					280					285			
1047	Lys	Val	Gly	Lys	Phe	Tyr	Glu	Leu	Tyr	Glu	Leu	Asp	Ala	Glu	Leu	Gly
1048			290				295					300				
1049	His	Lys	Glu	Leu	Asp	Trp	Lys	Met	Thr	Met	Ser	Gly	Val	Gly	Lys	Cys
1050	305					310					315					320
1051	Arg	Gln	Val	Gly	Ile	Ser	Glu	Ser	Gly	Ile	Asp	Glu	Ala	Val	Gln	Lys
1052				325						330					335	
1053	Leu	Leu	Ala	Arg	Gly	Tyr	Lys	Val	Gly	Arg	Ile	Glu	Gln	Leu	Glu	Thr
1054			340						345					350		
1055	Ser	Asp	Gln	Ala	Lys	Ala	Arg	Gly	Ala	Asn	Thr	Ile	Ile	Pro	Arg	Lys
1056			355					360						365		
1057	Leu	Val	Gln	Val	Leu	Thr	Pro	Ser	Thr	Ala	Ser	Glu	Gly	Asn	Ile	Gly
1058			370				375					380				
1059	Pro	Asp	Ala	Val	His	Leu	Leu	Ala	Ile	Lys	Glu	Ile	Lys	Met	Glu	Leu
1060	385					390					395					400
1061	Gln	Lys	Cys	Ser	Thr	Val	Tyr	Gly	Phe	Ala	Phe	Val	Asp	Cys	Ala	Ala
1062				405					410						415	
1063	Leu	Arg	Phe	Trp	Val	Gly	Ser	Ile	Ser	Asp	Asp	Ala	Ser	Cys	Ala	Ala
1064			420						425					430		
1065	Leu	Gly	Ala	Leu	Leu	Met	Gln	Val	Ser	Pro	Lys	Glu	Val	Leu	Tyr	Asp
1066			435				440						445			
1067	Ser	Lys	Gly	Leu	Ser	Arg	Glu	Ala	Gln	Lys	Ala	Leu	Arg	Lys	Tyr	Thr
1068			450				455					460				
1069	Leu	Thr	Gly	Ser	Thr	Ala	Val	Gln	Leu	Ala	Pro	Val	Pro	Gln	Val	Met
1070	465					470					475					480
1071	Gly	Asp	Thr	Asp	Ala	Ala	Gly	Val	Arg	Asn	Ile	Ile	Glu	Ser	Asn	Gly
1072				485					490						495	
1073	Tyr	Phe	Lys	Gly	Ser	Ser	Glu	Ser	Trp	Asn	Cys	Ala	Val	Asp	Gly	Leu
1074			500						505					510		
1075	Asn	Glu	Cys	Asp	Val	Ala	Leu	Ser	Ala	Leu	Gly	Glu	Leu	Ile	Asn	His
1076			515				520						525			
1077	Leu	Ser	Arg	Leu	Lys	Leu	Glu	Asp	Val	Leu	Lys	His	Gly	Asp	Ile	Phe
1078			530				535					540				
1079	Pro	Tyr	Gln	Val	Tyr	Arg	Gly	Cys	Leu	Arg	Ile	Asp	Gly	Gln	Thr	Met
1080	545					550					555					560
1081	Val	Asn	Leu	Glu	Ile	Phe	Asn	Asn	Ser	Cys	Asp	Gly	Gly	Pro	Ser	Gly
1082				565					570						575	
1083	Thr	Leu	Tyr	Lys	Tyr	Leu	Asp	Asn	Cys	Val	Ser	Pro	Thr	Gly	Lys	Arg
1084			580						585					590		
1085	Leu	Leu	Arg	Asn	Trp	Ile	Cys	His	Pro	Leu	Lys	Asp	Val	Glu	Ser	Ile
1086			595				600						605			
1087	Asn	Lys	Arg	Leu	Asp	Val	Val	Glu	Glu	Phe	Thr	Ala	Asn	Ser	Glu	Ser
1088			610				615					620				
1089	Met	Gln	Ile	Thr	Gly	Gln	Tyr	Leu	His	Lys	Leu	Pro	Asp	Leu	Glu	Arg
1090	625					630					635					640
1091	Leu	Leu	Gly	Arg	Ile	Lys	Ser	Ser	Val	Arg	Ser	Ser	Ala	Ser	Val	Leu

RAW SEQUENCE LISTING

DATE: 10/21/2002

PATENT APPLICATION: US/09/529,239B

TIME: 18:20:24

Input Set : N:\Crf4\Refhold\I529239B.raw

Output Set: N:\CRF4\10212002\I529239B.raw

1092		645		650		655	
1093	Pro	Ala	Leu	Leu	Gly	Lys	Lys
1094							
1095	Gly	Gln	Ile	Val	Lys	Gly	Phe
1096							
1097	Leu	Gln	Lys	Glu	Ser	Asn	Met
1098							
1099	Leu	Pro	Ile	Leu	Val	Gly	Lys
1100							
1101	Phe	Glu	Ala	Ala	Ile	Asp	Ser
1102							
1103	Val	Thr	Asp	Glu	Asn	Ala	Glu
1104							
1105	Ile	Glu	Arg	Ala	Thr	Gln	Trp
1106							
1107	Leu	Asp	Val	Leu	Arg	Ser	Phe
1108							
1109	Ser	Met	Ala	Arg	Pro	Val	Ile
1110							
1111	Asn	Gln	Lys	Thr	Lys	Gly	Pro
1112							
1113	Pro	Phe	Ala	Val	Ala	Ala	Asp
1114							
1115	Leu	Leu	Gly	Glu	Ala	Arg	Arg
1116							
1117	Leu	Leu	Leu	Thr	Gly	Pro	Asn
1118							
1119	Ala	Thr	Cys	Leu	Ala	Val	Ile
1120							
1121	Cys	Glu	Ser	Cys	Glu	Ile	Ser
1122							
1123	Gly	Ala	Ser	Asp	Arg	Ile	Met
1124							
1125	Cys	Thr	Glu	Thr	Ala	Ser	Val
1126							
1127	Val	Ile	Leu	Asp	Glu	Leu	Gly
1128							
1129	Ala	Ile	Ala	Tyr	Ser	Val	Phe
1130							
1131	Arg	Met	Leu	Phe	Ala	Thr	His
1132							
1133	Ser	His	Pro	Arg	Val	Thr	Ser
1134							
1135	Arg	Ser	Asp	Tyr	Gln	Pro	Arg
1136							
1137	Tyr	Arg	Leu	Thr	Glu	Gly	Ala
1138							
1139	Ala	Leu	Met	Ala	Gly	Ile	Pro
1140							

RAW SEQUENCE LISTING

DATE: 10/21/2002

PATENT APPLICATION: US/09/529,239B

TIME: 18:20:24

Input Set : N:\Crf4\Refhold\I529239B.raw

Output Set: N:\CRF4\10212002\I529239B.raw

1141	Ala	Ala	Gln	Ala	Met	Lys	Arg	Ser	Ile	Gly	Glu	Asn	Phe	Lys	Ser	Ser
1142				1045						1050					1055	
1143	Glu	Leu	Arg	Ser	Glu	Phe	Ser	Ser	Leu	His	Glu	Asp	Trp	Leu	Lys	Ser
1144				1060						1065					1070	
1145	Leu	Val	Gly	Ile	Ser	Arg	Val	Ala	His	Asn	Asn	Ala	Pro	Ile	Gly	Glu
1146				1075						1080					1085	
1147	Asp	Asp	Tyr	Asp	Thr	Leu	Phe	Cys	Leu	Trp	His	Glu	Ile	Lys	Ser	Ser
1148				1090						1095					1100	
1149	Tyr	Cys	Val	Pro	Lys											
1150				1105												

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 10/21/2002
PATENT APPLICATION: US/09/529,239B TIME: 18:20:25

Input Set : N:\Crf4\Refhold\I529239B.raw
Output Set: N:\CRF4\10212002\I529239B.raw

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 30
Seq#:2; Line(s) 53
Seq#:3; Line(s) 68
Seq#:4; Line(s) 78
Seq#:5; Line(s) 88
Seq#:6; Line(s) 98
Seq#:7; Line(s) 108
Seq#:8; Line(s) 118
Seq#:9; Line(s) 128
Seq#:10; Line(s) 138
Seq#:11; Line(s) 148
Seq#:12; Line(s) 175,176,177,178
Seq#:13; Line(s) 186
Seq#:14; Line(s) 196
Seq#:15; Line(s) 223,224,225,226,227,228,229,230,231,232,233,234,235,236
Seq#:15; Line(s) 237,238,239,240,241
Seq#:16; Line(s) 249
Seq#:17; Line(s) 259
Seq#:18; Line(s) 271,479,480
Seq#:20; Line(s) 631
Seq#:21; Line(s) 641
Seq#:22; Line(s) 650
Seq#:23; Line(s) 660
Seq#:24; Line(s) 670
Seq#:25; Line(s) 680
Seq#:26; Line(s) 707,708,709,710,711,712,713,714,715,716,717,718,719,720
Seq#:26; Line(s) 721,722,723,724,725,726,727
Seq#:27; Line(s) 751,752,753,754,755,756,757
Seq#:28; Line(s) 765
Seq#:29; Line(s) 775
Seq#:30; Line(s) 787,1001,1002
Seq#:32; Line(s) 1157
Seq#:33; Line(s) 1166
Seq#:34; Line(s) 1175
Seq#:35; Line(s) 1185
Seq#:36; Line(s) 1195
Seq#:37; Line(s) 1205
Seq#:38; Line(s) 1215
Seq#:39; Line(s) 1225
Seq#:40; Line(s) 1235
Seq#:41; Line(s) 1245
Seq#:42; Line(s) 1255
Seq#:43; Line(s) 1265

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/529,239B

DATE: 10/21/2002
TIME: 18:20:25

Input Set : N:\Cr4\Refhold\I529239B.raw
Output Set: N:\CRF4\10212002\I529239B.raw

Seq#:44; Line(s) 1275
Seq#:45; Line(s) 1285
Seq#:46; Line(s) 1295
Seq#:47; Line(s) 1305
Seq#:48; Line(s) 1315
Seq#:49; Line(s) 1325
Seq#:50; Line(s) 1335
Seq#:51; Line(s) 1345
Seq#:52; Line(s) 1355
Seq#:53; Line(s) 1365
Seq#:54; Line(s) 1375
Seq#:55; Line(s) 1385
Seq#:56; Line(s) 1395
Seq#:57; Line(s) 1405
Seq#:58; Line(s) 1415
Seq#:59; Line(s) 1425
Seq#:60; Line(s) 1435
Seq#:61; Line(s) 1445
Seq#:62; Line(s) 1455
Seq#:63; Line(s) 1465
Seq#:64; Line(s) 1475
Seq#:65; Line(s) 1485
Seq#:66; Line(s) 1495
Seq#:67; Line(s) 1505
Seq#:68; Line(s) 1515
Seq#:69; Line(s) 1525
Seq#:70; Line(s) 1535
Seq#:71; Line(s) 1545
Seq#:72; Line(s) 1555
Seq#:73; Line(s) 1565
Seq#:74; Line(s) 1575
Seq#:75; Line(s) 1585
Seq#:76; Line(s) 1595
Seq#:77; Line(s) 1605
Seq#:78; Line(s) 1615
Seq#:79; Line(s) 1625
Seq#:80; Line(s) 1635
Seq#:81; Line(s) 1645
Seq#:82; Line(s) 1655
Seq#:83; Line(s) 1665
Seq#:84; Line(s) 1675
Seq#:85; Line(s) 1685
Seq#:86; Line(s) 1695
Seq#:87; Line(s) 1705
Seq#:88; Line(s) 1715
Seq#:89; Line(s) 1725
Seq#:90; Line(s) 1735
Seq#:91; Line(s) 1745
Seq#:92; Line(s) 1755

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 10/21/2002
PATENT APPLICATION: US/09/529,239B TIME: 18:20:25

Input Set : N:\Crf4\Refhold\I529239B.raw
Output Set: N:\CRF4\10212002\I529239B.raw

Seq#:93; Line(s) 1765
Seq#:94; Line(s) 1775
Seq#:95; Line(s) 1785
Seq#:96; Line(s) 1795
Seq#:97; Line(s) 1805
Seq#:98; Line(s) 1833,1834,1835,1836,1837,1838,1839,1840,1841,1842,1843
Seq#:98; Line(s) 1844,1845,1846,1847,1848,1849,1850,1851,1852,1853,1854
Seq#:98; Line(s) 1855,1856,1857,1858,1859,1860,1861,1862,1863,1864,1865
Seq#:98; Line(s) 1866,1867,1868,1869,1870,1871,1872,1873,1874,1875,1876
Seq#:98; Line(s) 1877,1878,1879,1880,1881,1882,1883,1884,1885,1886,1887
Seq#:98; Line(s) 1888,1889,1890,1891,1892,1893,1894,1895,1896,1897,1898
Seq#:98; Line(s) 1899,1900,1901,1902,1903,1904,1905,1906,1907,1908,1909
Seq#:98; Line(s) 1910,1911,1912,1913,1914,1915,1916,1917,1918,1919,1920
Seq#:98; Line(s) 1921,1922,1923,1924,1925,1926,1927,1928,1929,1930,1931
Seq#:98; Line(s) 1932,1933,1934,1935,1936,1937,1938,1939,1940,1941,1942
Seq#:98; Line(s) 1943,1944,1945,1946,1947,1948,1949,1950

VERIFICATION SUMMARY

DATE: 10/21/2002

PATENT APPLICATION: US/09/529,239B

TIME: 18:20:25

Input Set : N:\Crf4\Refhold\I529239B.raw

Output Set: N:\CRF4\10212002\I529239B.raw

L:7 M:270 C: Current Application Number differs, Wrong Format
L:38 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0
L:61 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0
L:158 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:12
L:206 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:15
L:488 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:19
L:690 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:26
L:734 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:27
L:1010 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:31